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| APPLICATION NO.                                                            | FILING DATE                               | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------------------------------------------------|-------------------------------------------|----------------------|---------------------|------------------|
| 10/822,372                                                                 | 04/12/2004                                | George J. Hobbs      | 5724-001            | 2828             |
| 20101                                                                      | 25184 7590 12/27/2007<br>WILLIAM J. MASON |                      | EXAMINER            |                  |
| MACCORD MASON PLLC<br>POST OFFICE BOX 1489<br>WRIGHTSVILLE BEACH, NC 28480 |                                           | . *                  | SAFAVI, MICHAEL     |                  |
|                                                                            |                                           |                      | ART UNIT            | PAPER NUMBER     |
| WIGHTS VI.                                                                 |                                           | •                    | 3637                |                  |
|                                                                            |                                           |                      |                     |                  |
|                                                                            | •                                         |                      | MAIL DATE           | DELIVERY MODE    |
|                                                                            |                                           |                      | 12/27/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Application No.                                                                                                                                                              | Applicant(s)                                                               |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--|--|
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 10/822,372                                                                                                                                                                   | HOBBS, GEORGE J.                                                           |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Examiner                                                                                                                                                                     | Art Unit                                                                   |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | M. Safavi                                                                                                                                                                    | 3637                                                                       |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              |                                                                            |  |  |
| WHIC<br>- Exter<br>after<br>- If NC<br>- Failu<br>Any                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Poperiod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION<br>36(a). In no event, however, may a reply be time<br>rill apply and will expire SIX (6) MONTHS from<br>cause the application to become ABANDONEI | N. sely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              |                                                                            |  |  |
| 1)⊠                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Responsive to communication(s) filed on 21 Se                                                                                                                                                                                                                                                                                                                                                                                                                                   | eptember 2007.                                                                                                                                                               |                                                                            |  |  |
| ′=                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | This action is <b>FINAL</b> . 2b) This action is non-final.                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                              |                                                                            |  |  |
| 3)∐                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              |                                                                            |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              |                                                                            |  |  |
| Dispositi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | on of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                              |                                                                            |  |  |
| <ul> <li>4)  Claim(s) 1,3-5,22,24-26 and 30 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1,3-5,22,24-26 and 30 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              |                                                                            |  |  |
| Applicati                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | on Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                              |                                                                            |  |  |
| 10) 🗌                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | The specification is objected to by the Examiner The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the correction of the correction of the oath or declaration is objected to by the Example 2.                                                                                                                                                                                                                                         | epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj                                                                  | ected to. See 37 CFR 1.121(d).                                             |  |  |
| Priority u                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ınder 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                              |                                                                            |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              |                                                                            |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              |                                                                            |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | e of References Cited (PTO-892)                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4) Interview Summary                                                                                                                                                         |                                                                            |  |  |
| 3) 🔲 Inforn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date                                                                                                                                                                                                                                                                                                                                                                | Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:                                                                                                                       |                                                                            |  |  |

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## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-5, 22, 24-26, and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 3-4 of claim 1 appear to define the claimed form in terms of an element which has not been positively introduced within the claim language. Therefore, it is not clear as to what "having…a length substantially equal to the pad given thickness" defines since a concrete pad does not form part of the invention.

Claim 30, lines 4-5 of claim 30 appear to define the claimed form in terms of an element which has not been positively introduced within the claim language. Therefore, it is not clear as to what "having...a length substantially equal to said given thickness" defines since a concrete pad does not form part of the invention.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 4, 22, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman '525.

As for **claims 1 and 24**, Coleman discloses an "open top" polymer form 10 comprising a plurality of spaced, vertically aligned conduits 20, 22, 24, 26 having upper ends with spacers, (36 between each conduit), connecting the conduits, the ends 28, 30, 32, 34, of the form 10 constituting the sidewalls with Fig. 1 showing a rectangular shape. Coleman does not specifically set forth removable caps covering the conduit upper ends of the conduits 20, 22, 24, 26. However, Fig. 8d and col. 4, lines 47-49 of Coleman teach utilization of caps 86 covering conduits prior to final use of the form 10. And, col. 4, line 15 of Coleman teaches utilization of a cap 73 to close conduit 72 prior to final use. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the Coleman form of Fig. 1 with caps at the upper end thereof so as to inhibit any material such as debris, as taught by either of col. 4, lines 47-49 and col. 4, line 15 of Coleman. As **to claim 1**, the Coleman '525 conduits possess a length and thus, meet the recitation of "having...a length substantially equal to said given thickness".

As for **claim 3**, forming the polymer Coleman form of a thermoplastic material such as a polyvinylchloride, thus taking advantage of such an old and well known material in the building art, would have constituted a further obvious to one having ordinary skill in the art at the time the invention was made.

As for **claim 4**, the form is of a rectangular shape with side 28, 30 and end 32, 34 walls.

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As for **claims 22 and 24**, forming the Coleman mold of a shape having two rows of conduits, thus "arrayed in a rectangular or diamond shape", for the purpose of providing a thicker wall as well as for versatile, multiple conduit placement, would have been obvious to one having ordinary skill in the art at the time the invention was made particularly, since it is well established that mere duplication of parts has no patentable significance unless a new and unexpected result is produced, *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

As for **claim 25 and 26**, taking into consideration dimensions 'C' and 'D' of Coleman, the Coleman conduits 20, 22, 24, 26 possess a cross-sectional area "of from about 0.25 to about 2.0 inches". And, the Coleman form would include "about 4 to about 100 conduits per square foot of form".

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman '525 as applied to claims 1, 3, 4, and 6 above, and further in view of De Zen '620.

De Zen teaches utilization of thermoplastic material for use in a structural form, col. 2, lines 40-41. Therefore, to have formed the modified Coleman form of a thermoplastic polymer, thus taking advantage of such an old and well known material in the building art, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by De Zen.

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Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman '525 as applied to claims 1, 3, 4, and 6 above, and further in view of any of Dirksing, Hasty, Narva, Goth and Szabo.

Coleman '525 as modified fails to disclose caps having pull-tabs to assist in removal of the caps from the conduits 20, 22, 24, 26. However, each of Hasty, Narva, Goth and Szabo disclose, as conventional, pull-tabs, 1c of Fig. 1 of Dirksing, 12/14/16 of Hasty, 24 of Narva, 11/21 of Goth, and col. 1, line 46 of Szabo. Therefore, to have formed the modified Coleman form 10 with caps 86 integral with the conduits 20 22, 24, 26 and possessing pull tabs, thus allowing easy removal thereof while providing a cap secured in place prior to final use of the form, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by any of Dirksing, Hasty, Narva, Goth and Szabo.

Claims 1, 3, 4, 22, and 24-26, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hargett '177 in view of Coleman '525.

Hargett discloses, Figs. 2-4, a polymer form 10 comprising a plurality of spaced, vertically aligned conduits 16 having upper ends with spacers, (upper portions of 12, 14), connecting the conduits, the ends of the form 10 constituting the sidewalls with Fig. 4 showing a rectangular shape. Hargett does not specifically set forth removable caps covering the conduit upper ends. The floor of Hargett lies along the lower portions, (lower surface) of 12 and 14 with such floor extending upwardly to form the conduits 16 and spacers, (upper portions of 12, 14).

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However, Coleman teaches utilization of caps covering conduits during concrete pour forming so as to prevent concrete from entering the conduit during the pour.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the Hargett form with caps so as to inhibit concrete from entering the conduit as taught by Coleman.

As for **claims 22 and 24**, the conduits 16 can be seen as are arranged in a rectangular or diamond-shaped configuration.

As for claims 25 and 26, forming the Hargett '177 conduits 16 with a cross-sectional area "of from about 0.25 to about 2.0 inches", thus serving to allow for drainage while not appreciably interrupting with the surface of the concrete pavement, would have been obvious to one having ordinary skill in the art at the time the invention was made. Further, forming the Hargett '177 form with the conduits 16 spaced so as to include "about 4 to about 100 conduits per square foot of form", thus serving to allow for appropriate drainage depending upon, for example, average rainfall of a particular region, would have constituted a further obvious expedient to one having ordinary skill in the art at the time the invention was made.

As for **claim 30**, the polymer form 10 of Hargett can be manufactured by vacuum molding or vacuum forming. The recitation of "vacuum forming" appears as a "product by process limitation which does not serve to read over the polymer form 10 of Hargett.

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Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hargett '177 in view of Coleman '525 as applied to claims 1-4 and 6 above, and further in view of Rothberg '314.

To have formed the modified Hargett form of a thermoplastic polymer, thus providing a light weight, low cost material, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Rothberg at col. 4, line 63.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hargett '177 in view of Coleman '525 as applied to claims 1-4 and 6 above, and further in view of Reyneveld '345.

Hargett discloses ends of the form 10 which would constitute the sidewalls with Fig. 4 showing a rectangular shape. In any event, Hargett, as modified, does not specifically set forth a border form perimeter for holding poured concrete in place while forming the resulting slab structure.

However, Reyneveld teaches, Fig. 1, application and utilization of an outer perimeter form 10 serving to contain concrete 12. Therefore to have utilized an outer perimeter form serving to contain the modified Hargett concrete particularly during placement thereof, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Reyneveld.

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Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hargett '177 in view of Coleman '525 as applied to claims 1, 3, 4, 21, 22, and 24-26, and 30 above, and further in view of any of Dirksing '886, Hasty '334, Narva '435, Goth '618 and Szabo '232.

Hargett as modified by either of Stolz and Harbeke fails to disclose pull-tabs to assist in removal of the caps from the conduits. However, each of Hasty, Narva, Goth and Szabo disclose, as conventional, pull-tabs, 1c of Fig. 1 of Dirksing, 12/14/16 of Hasty, 24 of Narva, 11/21 of Goth, and col. 1, line 46 of Szabo. Therefore, to have formed the modified Hargett '177 form with caps possessing pull tabs, thus allowing easy removal thereof, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by any of Dirksing, Hasty, Narva, Goth and Szabo.

## Response to Arguments

Applicant's arguments filed September 21, 2007 have been fully considered but they are not persuasive. As for Applicant's argument against Coleman, it is not seen why "[c]oncrete or other material cannot be poured onto the spacers and around the conduits in the Coleman structure." Further, any concrete poured on, over or into the Coleman form will be poured onto the spacers, spacers, (36 between each conduit), connecting the conduits whether poured from one side or the other of Coleman.

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As for Hargett, Applicant's argument to "the water in Hargett does not escape beneath the pad, but is directed through the lateral conduits to storm drains outside the pavement structure" appear directed to desired effect and do not serve to overcome the rejection involving Hargett. Further, Applicant's argument that "unlike the claimed invention where the conduits have lengths substantially equal to the length of the pad so that water drains through the conduits to escape beneath the pad, the Hargett "vertical conduits" extend only from the upper surface of the pavement to join the lateral conduits that are within the body of the pad" is not convincing particularly, with the language of claims 1, 3-5, 22, 24-26, and 30 directed to a form per se. As for Applicant's argument at lines 2-4 on page 6 of the response, Coleman teaches providing a removable cap covering a passage prior to opening of the passage for use. As such, Coleman would teach to provide Hargett with removable caps so as to protect the conduits 16 when pouring concrete 18.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Safavi whose telephone number is (571) 272-7046. The examiner can normally be reached on Mon.-Fri., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M. Safavi December 16, 2007

> MICHAEL CASAVI PRIMARY EXPERIMENT ART UNIT 254